

1238

POSTER

Perceptions about breast cancer in high school students in Mexico City

A. Fuentes-Alburo¹, L. Tirado-Gomez², C. Lara-Sanchez³, C. Lopez de Lara-Espinosa³, N. Sadek-Palazuelos³, V.J. Garcia-Valdivinos⁴.

¹Instituto Nacional de Cancerología-México, Jefatura de Postgrado y Educación Médica Continua, Mexico D.F., Mexico; ²Instituto Nacional de Cancerología-México, Departamento de Epidemiología, Mexico D.F., Mexico; ³Escuela Tomas Alva Edison, Bachillerato, Mexico D.F., Mexico; ⁴Escuela Tomas Alva Edison, Coordinador de Biología y del Programa de Desarrollo Sustentable, Mexico D.F., Mexico

Background: Breast cancer is the second most frequent neoplasia in women in Mexico, behind cervical cancer. Many studies exist that show that unknowledge of risk factors and early detection measures are some of the most important factors in the delayed diagnosis of breast cancer. In the last 5 years Mexico have had a huge campaign of information on media on charge of central government, NGOs and the own media, which apparently has increased the knowledge of general population in regard to early detection of breast cancer. Tomas Alva Edison School is a private high school attempting to increase the interest of the students in science since their early ages, creating deals with different centers to develop research that will give some help to the populations. This project has been created and developed for a team of high school students with support of a teacher and researchers of the Instituto Nacional de Cancerología (National Cancerology Institute-Mexico) in Mexico City to evaluate the knowledge and perceptions of breast cancer in urban high school students.

Material and Methods: We applied questionnaires face-to-face to 11th- and 12th-grade high school students from public and private schools. Our perspective was that private school students would have a better perspective of breast cancer than public school students, allowing us to find opportunity areas to teach about cancer.

Results: We interviewed 330 students from private schools and 348 from public schools, 36% male, 64% female (without statistic difference), mean age 17.8 y-os (14 to 25 years-old). Statistical differences are listed in the table.

| | Public schools (%) | Private schools (%) | p value (χ^2) |
|--|--------------------|---------------------|----------------------|
| Family history of cancer in general | 35 | 60.6 | <0.001 |
| Perception of high breast cancer incidence in Mexico | 95.1 | 85.7 | <0.001 |
| Knowledge of breast cancer risk factors | 72.4 | 57.5 | <0.001 |
| Monthly self-examination (male/female) | 39.3 | 22.7 | <0.001 |
| Monthly self-examination (only female) | 56.3 | 29.4 | <0.001 |
| Knowledge of mammography indications | 29.8 | 48.4 | <0.001 |
| Desire to know more about this issue | 92.5 | 76 | <0.001 |

As additional data we found that 68% in both groups have familiar open communication about sex and health issues like cancer, 74% know that exist breast cancer in male and 95% read routinely newspapers and magazines.

Conclusions: According to our results, high school teenagers have a medium level of knowledge about breast cancer, so we need to encourage the publication of cancer and other health issues in media in general. We plan to develop a pamphlet to enhance knowledge about the topic since 7th grade and apply the questionnaire in county population of the same education level to develop a national program.

1239

POSTER

Radiodermatitis affects more than a half of cancer patients submitted to radiotherapy, hence skin support measures mainly with urea are now widely recommended. The ESPI project

A. Mirada¹, N. Carballo², P. Peleteiro³, J. Pachón⁴. ¹Isdin, Medical Area, Barcelona, Spain; ²Centro Oncológico MD Anderson, Oncoradioterapia, Madrid, Spain; ³Hospital Universitario de Santiago, Oncoradioterapia, Santiago de Compostela, Spain; ⁴Hospital Universitario Virgen del Rocío, Oncoradioterapia, Sevilla, Spain

Background: To assess the profile of the patient submitted to radiotherapy (RT) for cancer in Spain.

Materials and Methods: Epidemiological survey in patients treated with RT for cancer in Spain, recruited by 110 investigators from 54 centers covering nearly all the country.

Results: A total of 1798 patients were registered; 56.4% [CI95%: 54.1–58.7] women and 43.6% [CI95%: 41.3–45.9] men. Mean age was greater in men (63.5 [CI95%: 62.6–64.4] years vs 57.0 [CI95%: 56.2–57.8]

years; $p < 0.001$). Among men, cancer types most frequently seen were ORL (28.9%), prostate (27.2%) and lung (10.0%) tumors; whereas in women, breast cancer was the most frequent (77.4%). A 67.1% of patients had been submitted to surgery, most (96.6%) prior to RT. A 57.2% received chemotherapy (CT), 56.4% of them prior to RT, 34.0% simultaneously to RT, 1.6% after RT and 8.1% in several therapy phases. Hormone-therapy was only given in some types of cancer, 67.7% of breast cancers and 61.2% of prostate cancers. Globally, 52.1% of patients showed radiodermatitis (26.0% grade 1; 16.2% grade 2; 5.5% grade 3 and 1.3% grade 4). This proportion varied notably if patients who had also been submitted to CT (60.7% vs 39.3%, $p = 0.001$; O.R.: 1.37 [CI95%: 1.13–1.66]). Skin support measures were recommended to most patients: primary prophylaxis (40.2%), both primary and secondary prophylaxis (41.8%) or secondary prophylaxis (10.8%) whereas only a 7.7% of patients were submitted to RT without skin support measures. Prescribed products were mainly skin creams specific for RT, most containing urea.

Conclusions: Main cancers submitted to RT are ORL and prostate tumors in men and breast cancer in women. More than a half of patients submitted to RT suffer radiodermatitis being this risk even greater if chemotherapy is also given. 92% of patients are prescribed with skin support measures as primary and/or secondary prophylaxis in Spain. The products used are specific for RT, being Urea the must prescribed principal ingredient

1240

POSTER

Recent Czech study on lung cancer risk from radon and smoking

L. Tomasek¹, A. Kubik². ¹National Radiation Protection Institute, Epidemiology, Prague, Czech Republic; ²University Hospital Na Bulovce, Pneumology and Thoracic Surgery, Prague, Czech Republic

Background: For a number of countries, including the Czech Republic, environmental exposure to radon is the second most important cause of lung cancer in the general population after cigarette smoking, the aim of the study is to quantify the risk from radon in Czech houses and to assess combined effect from radon and smoking.

Materials and Methods: The presentation is based on two studies. One among patients of a major Prague hospital (77 cases, 155 hospital controls) and the other among inhabitants of a radon prone area of central Bohemia (218 cases, 870 population controls). Radon measurements in these studies were based on passive alpha track detectors exposed for 4 and 12 months in the current home, respectively. The statistical assessment of the study was based on logistic regression and allowance was made for potential confounders (like age, gender, or smoking).

Results: The analysis is based on a total of 295 cases of lung cancer and 1025 control subjects. As expected, mean radon levels among cases and controls are significantly different in both studies (hospital based study: 115 and 84 Bq/m³, central Bohemia study: 519 and 493 Bq/m³). The relative risk of lung cancer by exposure categories shows significant trend overall ($p = 0.008$) and in each study ($p = 0.028$ and $p = 0.046$). The excess relative risk per unit exposure to radon is not substantially changed when additional adjustment for pack-years of smoking is included in the risk model.

Conclusions: The combined effect from radon and smoking is less than multiplicative, but more than additive. Supported by the Internal Grant Agency of the Czech Ministry of Health (NR 8411–3).

1241

POSTER

Treatment costs of skeletal-related events (SRE) in patients with metastatic breast or prostate cancer

J. Felix¹, V. Andreozzi², M. Soares¹, J. Passos-Coelho³, Portuguese Group for the Study of Bone Metastases. ¹Exigo Consultores, Health Economics, Alhos Vedros, Portugal; ²Escola Nacional de Saúde Pública-FIOCRUZ, ensp, Rio de Janeiro, Brazil; ³Instituto Português de Oncologia-Lisboa, Oncologia clínica, Lisboa, Portugal

Background: Pathologic fractures, spinal cord compression, surgery or radiation therapy to bone and tumour-induced hypercalcemia are common skeletal-related events (SRE) from breast (BC) and prostate (PrC) cancer metastases. SRE have major impact on patient's morbidity and mortality and are responsible for extensive health resource utilization (HRU). This study was designed to evaluate SRE-related direct hospital costs in Portuguese patients (pts) with BC or PrC and bone metastases.

Materials and Methods: We conducted a retrospective hospital clinical chart review cost analysis in pts with BC or PrC cancer and at least one SRE within 12 months prior to study entry. SRE treatment costs were calculated by multiplying resource utilization frequency (hospitalization, diagnostic tests, clinic visits, drugs) by the corresponding unit costs from the Portuguese Ministry of Health costs database. Generalized linear models with gamma distribution and log link were used to explain costs variability.

Results: A total of 152 pts (121 BC, 31 PrC) from nine hospitals were included. Radiotherapy (73.2%) and pathological fractures (13.7%) were